DOCUMENT RESUME

ED 397 564 EA 027 960

TITLE	The Uses of Time for Teaching and Learning. Volume III: Research Design and Method. Studies of Education Reform.
INSTITUTION	Policy Studies Associates, Inc., Washington, DC.
SPONS AGENCY	Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE	Sep 94
CONTRACT	RR91172006
NOTE	56p.; For Volumes I-IV of this particular study, see EA 027 958-961. For all 12 final reports (36 volumes) in this series of studies, see EA 027 926-961.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	Case Studies; Elementary Secondary Education; Extended School Day; Extended School Year; *Flexible Scheduling; Mixed Age Grouping; *Nongraded Instructional Grouping; Private Schools; Public Schools; *School Schedules; Student Interests; *Time Blocks; Time Factors (Learning); *Time Management
IDENTIFIERS	Studies of Education Reform (OERI)

ABSTRACT

This report describes the research design of a study that identified and evaluated a collection of reforms designed to enhance learning by altering the amount of and/or the quality of time devoted to learning. The study focused on the quantity and quality of time that teachers and students spent in school and, to a lesser extent, students' out-of-school activities. Researchers conducted case studies of 14 sites that had experimented with different ways of allocating time as a cornerstone of efforts to improve the quality of teaching and learning. All the schools served a substantial number of disadvantaged students. The sample included the following: (1) eight public schools and six private schools; (2) three elementary schools, five middle schools, two high schools serving grades 9-12, two secondary schools serving grades 7-12, one school serving grades 1-12, and one school serving students aged 16-21; (3) four residential schools; (4) eleven urban schools; (5) two schools that enrolled only boys; and (6) schools with student enrollments ranging from 20 to approximately 800. During the site visits, data were derived from the site-context record; interviews with teachers, administrators, and support staff; student focus groups; document analysis; and students' out-of-school-time diaries. Five exhibits are included. Appendices contain data-collection instruments and a list of reports derived from the study. (LMI)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

POLICY STUDIES ASSOCIATES, INC.
1718 CONNECTICUT AVENUE, N. W. • SUITE 400 • WASHINGTON, D. C. 20009 • (202) 939-9780

ED 397 564

EDUCATION REFORM AND THE USES OF TIME

Volume III: Research Design and Method

DRAFT

Authors

September 1994

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Prepared for the Office of Research,
Office of Educational Research and Improvement,
U.S. Department of Education
Contract RR91172006

EA 027 960

BEST COPY AVAILABLE

PREFACE

Changes over the past two decades in knowledge about teaching and learning have given rise to many reform efforts aimed at the availability and uses of time for educational pursuits. Educators and policymakers have begun to tinker with the quantity of time available for school periods, for the school day, and for the school year. Researchers and educational leaders are experimenting with and advocating new ways of structuring school time so that students assume more responsibility for directing their learning. These and other reforms more specifically targeted on teachers have intentionally recast the traditional decisionmaking structures in schools to give teachers more flexibility and control in addressing the myriad complex issues that their profession presents on a daily basis. Many of these groundbreaking reforms are yet in their infancy; as such, they offer up a host of unanswered questions. Among them are four broad policy questions that frame this study of the uses of time for learning:

- Are there more effective ways to structure learning time so that school schedules respond to the innate learning and developmental needs of students, not just the administrative needs of the school system?
- Are there more meaningful ways to "count" learning time other than by tracking school attendance and seat time? Which, if any, options are viable in practical terms?
- How does altering the amount of time students spend in school and the ways in which that time is used for teaching and learning affect the working conditions of teachers?
- How can schools get beyond the stage of individual program implementation to systemwide change? What federal, state, and local policies support or deter systemwide change related to the quantity of time available for learning and the ways in which time is used?

ACKNOWLEDGMENTS

CONTENTS

		Page
ACKNOWLEDGMENTS		ii
I.	RESEARCH DESIGN	1
	Conceptual Framework	1
	Conditions that Encourage or Deter Reforms	1
	Impacts of Innovative Uses of Time for Learning	2
	Overview of the Research Design	3
	Research Questions	5
	Quantity and Quality of Uses of Time in School	5
	Educative Uses of Out-of-School Time	8
II.	DATA COLLECTION	10
	Site Selection	10
	Site Visits	18
	Key Features of Fieldwork	18
	Site Visitor Training	19
	Core Fieldwork Activities	19
	Specialized Site Visit Plans	21
	Data Collection Instruments	23
III.	DATA ANALYSIS	25
	Within-case Analysis	26
	Cross-case Analysis	28
REFERENCES		30
APPENDIX A: DATA COLLECTION INSTRUMENTS		31
	Appendix A1: Site Context Record	32
	Appendix A2: Interview Guide for Adult Educators	35
	Appendix A3: Guide for Student Focus Groups	38
	Appendix A4: Activity Observation Instrument	41
	Appendix A5: Out-of-School Time Use Diary	43
	Appendix A6: Focus Group Methodology	45
APPENDIX B: STUDY PRODUCTS		49

LIST OF EXHIBITS

	Page
Exhibit 1: Conceptual Framework for a Study of Educational Uses of Time	4
Exhibit 2: Case Study Sites and Time Innovations	14
Exhibit 3: Case Study Sites and Time Innovations--Elementary/Secondary Breakdown	15
Exhibit 4: Case Study Sites and Time Innovations--Public/Private Breakdown	16
Exhibit 5: Case Study Sites and Time Innovations--Traditional/Nontraditional Curriculum and Instruction	17

I. RESEARCH DESIGN

Conceptual Framework

The central focus of this study was the description and evaluation of a collection of reforms designed to enhance learning by altering the amount and/or the quality of time devoted to learning. Exhibit 1 illustrates a framework for examining several aspects of time-related reforms. At the framework's center are the reforms themselves, grouped into the sub-topics that are the fundamental organizers for the study: (1) the quantity of time students spend in school; (2) the quality of the time they spend there; and (3) the quality of time spent out of school. Around the reforms, we outline a way of thinking about the issues of implementation and impact.

Conditions that Encourage or Deter Reforms

The preconditions that lead to adoption and implementation of specific time-related reforms appear at the top of Exhibit 1. Among the circumstances encouraging the initiation and sustenance of reforms in the use of time are the following:

- The decisionmakers' educational beliefs, including attitudes concerning the relative importance of particular learning outcomes and the merits of particular educational strategies
- Resources available to the decisionmakers and the cost of the various programs and other innovations that are competing for those resources
- Consideration of the lessons of research and practice--including craft knowledge--at the decisionmakers' disposal
- Incentives for support from students, instructors, families, and others affected by the reform

Because the decisionmakers differ across the three types of reforms, different factors shape them. The **quantity** of time students spend in school is largely determined by state and local policymakers, often with important participation from teachers' collective bargaining units.

In contrast, the **quality** of time use during school is less a matter of broad policy and more under the control of individual teachers and school administrators (although attempts at quality of time reforms are certainly facilitated or constrained by federal, state, and district mandates). Nevertheless, the skills and commitment of building-level educators are most likely to affect the adoption and successful implementation of reforms in the quality of school time.

Finally, many and varied decisionmakers are involved in determining the opportunities to learn that are available to students **outside the regular school day**. School districts, individual schools, community-based organizations, businesses, libraries, and museums are all possible sponsors of organized afterschool activities for young people. Particularly for younger children, parents make key decisions about what they will and will not participate in. As they get older, school-aged youth often make their own choices about how to use their "free time."

Impacts of Innovative Uses of Time for Learning

The underlying hypothesis of this study is that more time, less time, or different uses and configurations of time will result in improved learning outcomes for children and youth. The potential effects, however, are much broader. We also expected to find that different configurations and uses of time--particularly school time--would result in improved teaching and learning environments. Further, the positive outcomes of specific innovations might resonate within the sponsoring schools and communities, touching off a set of secondary changes in policy or organizational structures. Two categories of potential impacts are shown at the bottom of Exhibit 1: organizational effects and learner outcomes.

Organizational effects. Time-in-school issues, especially those related to the quality of time use by teachers and students, are directly related to current debates about alternatives to conventional curriculum, instruction, and assessment. For example, nongraded classrooms call into question the usefulness and appropriateness of traditional graded textbooks and tests. Scheduling reforms such as the "Copernican Plan" dislodge widely used curricula that focus on breadth of content coverage, replacing them with curricula that require more in-depth coverage of subject matter. Furthermore, instructional approaches such as cooperative learning redefine the roles of teachers and students and rearrange the nature of their time together. Finally, all of the quantity and quality innovations listed in Exhibit 1 also have implications for the amount and use of teachers' planning time.

Exhibit 1 contains two categories of organizational effects that may be affected by the quantity of time available for teaching and learning and the ways in which that time is used: policy effects

and effects on learning environments. Formal policy changes that result from successful innovations may take root at the district or building level. For example, the adoption of new curricula or assessment tools is typically the policy domain of the district's central office, while principals or site-based management teams routinely control such things as the school's internal schedule or formal arrangements for parent-teacher interactions. The second set of organizational effects--adaptations in learning environments--may occur within school buildings (e.g., rearrangements made in teachers' planning periods) and within classrooms (e.g., redistribution of the amount of time students spend listening to the teacher versus engaging in cooperative learning activities).

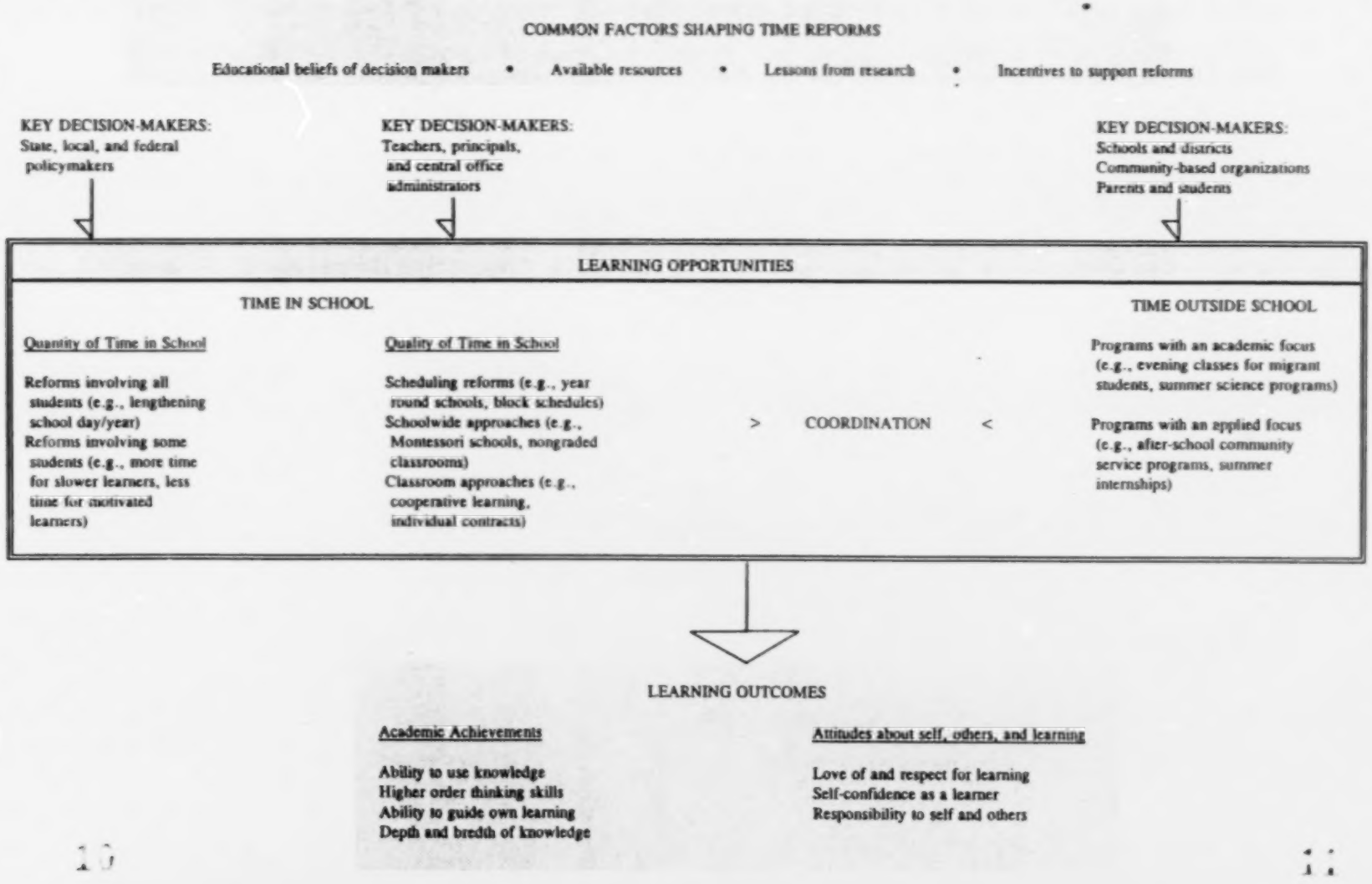
Learner outcomes. Because of the broad focus on opportunities to learn both in and out of school, we defined outcomes broadly. In Exhibit 1 we show two categories of outcomes that might be affected by the quantity or quality of time to learn in school and out: knowledge and attitudes. By necessity, the indicators of success that we used in evaluating time-related reforms went well beyond the usual standardized test results and included:

- The ability to ask appropriate questions, identify problems, and reach insightful solutions
- The ability to guide one's own learning
- The depth and breadth of content knowledge
- The ability to use knowledge
- Students' love of and respect for learning, self-confidence as learners, and sense of responsibility to themselves and others

Overview of the Research Design

The next section presents the research questions that guided this investigation. The research questions, like the conceptual framework, are organized by time in and outside school. In Chapter II we lay out the data collection plan, including our procedures for selecting the case study sites and conducting site visits. We also describe the purpose of each of our on-site data collection tasks. In the final chapter, we discuss our scheme for analyzing the data and reporting our findings. Appendix A includes all of the data collection instruments used during fieldwork. Appendix B lists the products that have resulted from this study of the Uses of Time for Teaching and Learning.

Exhibit 1
Conceptual Framework for a Study of Educational Uses of Time


COMMON FACTORS SHAPING TIME REFORMS
Educational beliefs of decision makers • Available resources • Lessons from research • Incentives to support reforms
KEY DECISION-MAKERS:
State, local, and federal policymakers
KEY DECISION-MAKERS:
Teachers, principals, and central office administrators
KEY DECISION-MAKERS:
Schools and districts
Community-based organizations
Parents and students
LEARNING OPPORTUNITIES
TIME IN SCHOOL
Quantity of Time in School
Reforms involving all students (e.g., lengthening school day/year)
Reforms involving some students (e.g., more time for slower learners, less time for motivated learners)
Quality of Time in School
Scheduling reforms (e.g., year round schools, block schedules)
Schoolwide approaches (e.g., Montessori schools, nongraded classrooms)
Classroom approaches (e.g., cooperative learning, individual contracts)
> COORDINATION <
TIME OUTSIDE SCHOOL
Programs with an academic focus (e.g., evening classes for migrant students, summer science programs)
Programs with an applied focus (e.g., after-school community service programs, summer internships)
LEARNING OUTCOMES
Academic Achievements
Ability to use knowledge
Higher order thinking skills
Ability to guide own learning
Depth and bredth of knowledge
Attitudes about self, others, and learning
Love of and respect for learning
Self-confidence as a learner
Responsibility to self and others

Research Questions

The research questions presented in this section incorporate and expand on the questions posed by the funding agency in its Request for Proposals. The funder's questions concerning international comparisons of educational uses of time were addressed through commissioned papers and are therefore not included below.[1]

The research questions appear below under two main headings: Quantity and Quality of Uses of Time **in School** and Educative Uses of **Out-of-School** Time. The questions pertaining to in-school time are further subdivided into three sections on design, implementation, and impact. For each overarching question listed, there are several subquestions that serve as further probes into the issues under investigation.

Quantity and Quality of Uses of Time in School

Design questions

(1) What was the context for the time-related reform initiative in individual sites?

- How do the reform approaches differ from prior practice in particular sites?
- When and why were the reforms undertaken? What problem areas do they address?
- Why were specific reform models selected? What role did research, research-based knowledge, and other information--such as craft knowledge--play in designing the initiatives?
- What, if any, evaluation plans were formulated to assess the impacts or outcomes of the initiative?
- Who participated in the design and decisionmaking process?
- How was commitment to the initiative established?
- What opposition has there been to the reform effort?

---

[1] The commissioned papers comprise a series of worklife portraits of elementary and secondary school teachers in five countries--the U.S., Japan, the Netherlands, Canada, and Australia. These worklife portraits and analyses of them will appear in a separate report produced by this study of education reform and the uses of time (see Appendix B).

(2) What are the key characteristics or components of the selected reform approaches to alternative uses of time?

- How complex are the reform approaches?
- How are quantity and quality of time in school issues interrelated? How, if at all, are in-school and out-of-school time issues related?
- What key characteristics or components cut across successful programs?
- What characteristics or components are missing from less successful programs in this area?
- What particular aspects of the selected reform approaches seem to be especially critical?

Implementation questions

(3) How has the initiative evolved over time?

- How was flexible was the initial design plan? How faithful has implementation been to the original design? What accounts for any modifications?
- For the more established initiatives, how has the initiative held up in light of the current reform movement? Has the movement enhanced or detracted form the initiative?
- What are the major tensions between state and local policymakers and teachers' collective bargaining units when addressing issues related to changes in the quantity of time students and educators spend in and out of school on school-related matters?

(4) What are principal incentives or barriers to implementing models of reform involving time use?

- What are the professional incentives or barriers? (e.g., rewards for risk-taking behaviors, training opportunities, availability of personal and professional time, professional satisfaction)
- What are the organizational incentives or barriers? (e.g., custodial staff operating procedures, scheduling and other logistical considerations, contractual issues, efficiency and productivity, collegiality vs. turf issues)
- What are the policy incentives or barriers? (e.g., testing, state regulations for curricular time use, support for coordination with other agencies, supplement-not-supplant requirements)
- What are the fiscal incentives or barriers? (e.g., no cost involved, need for more teachers or program staff, supplies and materials, higher salaries)

- How well does the research base inform implementation issues related to reform of time use in schools?

(5) How have barriers been overcome?

- Who were the key facilitators or problem solvers during implementation? (e.g., early converts, forceful administrators, committed teachers, community activists)
- What strategies did they use? (e.g., lobbying or canvassing, starting small, reason and logic, persistence, training)
- Where was money located? (e.g., state funds, local budget, federal grants, foundation grants)
- How could problems have been avoided or minimized?

(6) How could similar reforms be reproduced in other settings?

- What are the minimum requirements for successful replication? (e.g., funding, teacher commitment, regulatory waivers)
- What adaptations can be made in the reform model to meet local circumstances? Do adaptations dilute or strengthen the power of the model?

Impact questions

(7) What impact do reforms related to the use of time have on outcomes for students?

- What were the anticipated impacts and outcomes of the reform effort on student learning and attitudes toward learning? (e.g., better student performance on standardized tests, better problem-solving skills, improved social skills, improved attitude toward learning, improved motivation, improved self-esteem)
- How have educators in reform sites documented any impacts and outcomes of time-based reforms on student learning and outcomes toward learning? (e.g., pre- and post-test designs, comparison groups, alternative assessment systems, qualitative data, attitudinal surveys, interviews, teachers' informal records)
- What are the actual and unanticipated impacts and outcomes on student learning?
- How clear is the causal relationship between time-based reforms and documented or perceived impacts and outcomes for students?

(8) What are the anticipated and unanticipated effects of restructuring the use of time on different organizational levels of the educational system?

- What are the impacts at the state level?
- What are the impacts at the district level?
- What are the impacts at the school level?
- What are the impacts at the classroom level?
- Are there other systemic effects? (e.g., on the higher education system, other types of agencies)

(9) What are the overall strengths and weaknesses of each reform model examined?

- Do some models appear to produce more striking effects than others?
- Are there identifiable combinations of time-related reform strategies that are particularly powerful?

<u>Educative Uses of Out-of-School Time</u>[2]

(1) How do students use their non-school time at individual sites?

- What options are available to students given the general geographic location of their home and school communities? (i.e., rural, urban, suburban)
- Which groups of students tend to participate in which types of activities? Why?
- What factors influence students' decisions about how to spend their nonschool time (e.g., school requirement, parental pressure, personal interests)? What motivates some students to seek out learning activities in the absence of a motivator such as national exams?
- When and where do out-of-school learning activities take place? What is the duration, intensity, and quality of the activities?

---

[2] In order to further explore issues pertaining to out-of-school time use--specifically, means for extending productive learning time into non-school hours by linking formal and nonformal education experiences--PSA hosted an invitational conference. The conference proceedings are published as a separate document (see Appendix B).

(2) What is the relationship, intended or unintended, between student learning that occurs in school and out of school?

- What structures, if any, exist to help the participating students relate their educative out-of-school learning to academic knowledge and skills?
- How do students assess and compare the nature, amount, and quality of learning that goes on in and out of school?
- Is there any evidence that out-of-school experiences can/should substitute for either core classes or electives?

(3) For organized educative activities that occur outside of the school day:

- Who are the primary sponsors of the activity?
- What are the goals and objectives of the activity?
- Who are the intended participants? On what basis do they participate?

(4) What impacts do the out-of-school activities have on the participants?

- What cognitive skills do participants develop, if any?
- What social skills do participants develop, if any?
- What vocational or job-related skills do participants develop?
- What other behaviors do the out-of-school activities replace? What would the students be doing in the absence of the particular activity?

II. DATA COLLECTION

The fieldwork for this study included intensive investigations of time-related initiatives under the three study topics (i.e., quantity of school time, qualitative use of school time, and use of out-of-school time for learning), with substantial overlap among the sites selected. Our general approach to site selection can be characterized as a "best practices" design: We deliberately sought out schools where time-related innovations could be investigated. All the sites visited agreed to waive confidentiality and are named institutionally in all volumes of this report. Individual interviewees are not named.

The process of identifying sites involved a networking process. Initial nominations emerged from the literature review, the project's panel of experts, educators around the country, and previous work conducted by Policy Studies Associates. We narrowed the field through telephone calls to superintendents, school principals, and other program administrators to explain the purpose of the study and determine the suitability of individual sites for a case study. In a few instances where prior research had been conducted on the particular school or program, we contacted the researcher to gain additional information about the site.

Site Selection

Site selection revolved around those quantity and quality of time innovations identified by the literature review and the expert panel as effective or promising. We searched for case study sites that exemplify the following **quantity** of time innovations:

- Extended school day, week, and/or year programs that increase the amount of instructional time for students
- Year-round school programs that add instructional time to the standard 180 day school calendar[3]
- Residential programs that organize students' out-of-school time

[3] A more in-dept analysis of research and issues related to year-round education and school reform appears in a monograph that was produced by this study of education reform and the uses of time (see Funkhouser, Humphrey, & Adelman, forthcoming).

- Programs requiring less classroom instructional time of students

We also selected for case study sites reflecting the following **quality** of time innovations:

- Flexible use of existing time, such as (1) year-round schools that rearrange the school year but do not add instructional time to the standard 180 days and (2) block scheduling
- Use of heterogeneous instructional groups--nongraded or mixed age and/or ability groups
- Uses of technology and its integration into the curriculum
- Effective and innovative uses of teachers' time--both in and out of the classroom
- Other quality innovations involving the entire school program, such as accelerated schools or membership in the Coalition of Essential Schools

Additional site selection criteria included program maturity (i.e., has been in existence for at least three years), clearly defined program goals, apparently successful implementation, and reportedly positive student outcomes. The types of outcome data available varied, however, from test scores to more qualitative measures of student progress and satisfaction. In addition, we sought diversity regarding the type and/or combination of initiatives related to the use of time, the type of student population served by the program (disadvantaged, average, gifted), and community type (urban, suburban, and rural).

After considering various methodological issues associated with investigating students' out-of-school uses of time, the study's advisory panel recommended development of a data collection strategy that allowed us to characterize the afterschool activities of a sample of students within our quantity and quality of time sites. The strategy that we selected was an action research model that involved the direct participation of teachers and students in data collection on students' out-of-school time. Thus, we worked with teachers to develop a curriculum unit and an out-of-school time diary to collect and analyze data on students' out-of-school uses of time.

We selected 14 sites for case study visits. While most sites are individual schools, two are an entire district. In New Orleans we visited two schools that have experimented with a 240-day school year but we analyzed student outcome data for all the district's elementary schools. In New York City, we investigated the NYC High School Division's ConCurrent Options program, which gives overage secondary school students districtwide a set of flexible options for earning credits toward graduation. For this case study we conducted a thorough review of all program documentation

maintained by the district and interviewed a variety of people who participate in, administer, and manage the program.

Exhibit 2 provides an overview of the locations of and time innovations implemented by individual case study sites. As indicated, the sites selected represent a variety of both quantity and quality of time innovations. The sites span all major regions of the country in a variety of rural, urban, and suburban areas, and include several of the country's largest and more troubled school systems (Philadelphia, Houston, New York City). In addition, many sites offered opportunities to study several time innovations at once. Exhibits 3, 4, and 5 show that the case study sites represent a mix of elementary versus secondary programs, public versus private schools, and traditional versus nontraditional curriculum and instruction, respectively.

Exhibit 2
Case Study Sites and Time Innovations

	Time Innovations	
	Quantity	**Quality**
Alternative Middle Years (AMY), Philadelphia, PA [grades 6-8]		Ungraded Small class size Teacher time
The Beaver Island Lighthouse Alternative School, Beaver Island, MI [ages 16-21 yrs.]	Residential	Alternative school
The Chinquapin School, Highlands, TX [grades 7-12]	Residential	
Chiron Middle School, Minneapolis, MN [grades 6-8]	Less time (maybe)	Block scheduling Mixed-age group Experiential learning Teacher time
Girard College, Philadelphia, PA [grades 1-12]	Residential	
Hollibrook School, Houston, TX [grades K-5]		Accelerated school
Metro High School, Cedar Rapids, IA [grades 9-12]	Less time	Small class size Alternative school Coalition school Teacher time
Nativity Mission School, New York, NY [grades 6-8]	11 months 8:15 am - 9:30 pm	Small class size
Nativity Preparatory School, Boston, MA [grades 5-8]	Extended day	Small class size
New Orleans Public Schools, LA [grades K-5]	240 days	
Piney Woods School, Piney Woods, MS [grades 7-12]	Residential	
NYC High School Division, New York, NY - ConCurrent Options [grades 9-12]	Flexibility	
Timilty Middle School, Roxbury, MA [grades 6-8]	Extended day	Small class size Flexible schedule Teacher time
Wheeler Elementary, Louisville, KY [grades K-5]		Small class size Ungraded Team teaching

Exhibit 3
Case Study Sites and Time Innovations - Elementary/Secondary Breakdown

	Time Innovations	
	Quantity	Quality
Elementary Schools		
Girard College, Philadelphia, PA [grades 1-12]	Residential	
Hollibrook School, Houston, TX [grades K-5]		Accelerated school
New Orleans Public Schools, LA [grades K-5]		240 days
Wheeler Elementary, Louisville, KY [grades K-5]		Small class size Ungraded Team teaching
Middle\High Schools		
Alternative Middle Years (AMY), Philadelphia, PA [grades 6-8]		Ungraded Small class size Teacher time
Chiron Middle School, Minneapolis, MN [grades 6-8]	Less time (maybe)	Block scheduling Mixed-age group Experiential learning Teacher time
Nativity Mission School, New York, NY [grades 6-8]	11 months 8:15 am - 9:30 pm	Small class size
Nativity Preparatory School, Boston, MA [grades 5-8]	Extended day	Small class size
Timility Middle School, Roxbury, MA [grades 6-8]	Extended day	Small class size Flexible schedule Teacher time
The Beaver Island Lighthouse Alternative School, Beaver Island, MI [ages 16-21 yrs.]	Residential	Alternative school
The Chinquapin School, Highlands, TX [grades 7-12]	Residential	
Metro High School, Cedar Rapids, IA [grades 9-12]	Less time	Small class size Alternative school Coalition school Teacher time
Piney Woods School, Piney Woods, MS [grades 7-12]	Residential	Alternative school
NYC High School Division, New York, NY - ConCurrent Options [grades 9-12]	Flexibility	

Exhibit 4
Case Study Sites and Time Innovations - Public/Private Breakdown

	Time Innovations	
Public Schools/Programs	**Quantity**	**Quality**
Alternative Middle Years (AMY), Philadelphia, PA [grades 6-8]		Ungraded Small class size Teacher time
The Beaver Island Lighthouse Alternative School, Beaver Island, MI [ages 16-21 yrs.]	Residential	Alternative school
Chiron Middle School, Minneapolis, MN [grades 6-8]	Less time (maybe)	Block scheduling Mixed-age group Experiential learning Teacher time
Hollibrook School, Houston, TX [grades K-5]		Accelerated school
Metro High School, Cedar Rapids, IA [grades 9-12]	Less time	Small class size Alternative school Coalition school Teacher time
New Orleans Public Schools, LA [grades K-5]	240 days	
NYC High School Division, New York, NY – Concurrent Options [grades 9-12]	Flexibility	
Timility Middle School, Roxbury, MA [grades 6-8]	Extended day	Small class size Flexible schedule Teacher time
Wheeler Elementary, Louisville, KY [grades K-5]		Small class size Ungraded Team teaching
Private Schools		
The Chinquapin School, Highlands, TX [grades 7-12]	Residential	
Girard College, Philadelphia, PA [grade 1-12]	Residential	
Nativity Mission School, New York, NY [grades 6-8]	11 months 8:15 am - 9:30 pm	Small class size
Nativity Preparatory School, Boston, MA [grades 5-8]	Extended day	Small class size
Piney Woods School, Piney Woods, MS [grades 7-12]	Residential	

Exhibit 5
Case Study Sites and Time Innovations - Traditional/Nontraditional Curriculum and Instruction

	Time Innovations	
Traditional Curriculum and Instruction	**Quantity**	**Quality**
The Chinquapin School, Highlands, TX [grades 7-12]	Residential	
Girard College, Philadelphia, PA [grades 1-12]		
New Orleans Public Schools, LA [grades K-5]	240 days	
Nativity Mission School, New York, NY [grades 6-8]	11 months 8:15 am - 9:30 pm	Small class size
Nativity Preparatory School, Boston, MA [grades 5-8]	Extended day	Small class size
Piney Woods School, Piney Woods, MS [grades 7-12]	Residential	
Timility Middle School, Roxbury, MA [grades 6-8]	Extended day	Small class size Flexible schedule Teacher time
Alternative Schools		
Alternative Middle Years (AMY), Philadelphia, PA [grades 6-8]		Ungraded Small class size Teacher time
The Beaver Island Lighthouse Alternative School, Beaver Island, MI [ages 16-21 yrs.]	Residential	Alternative school
Chiron Middle School, Minneapolis, MN [grades 6-8]	Less time (maybe)	Block scheduling Mixed-age group Experiential learning Teacher time
Hollibrook School, Houston, TX [grades K-5]		Accelerated School
Metro High School, Cedar Rapids, IA [grades 9-12]	Less time	Alternative school Coalition school Teacher time
NYC High School Division, New York, NY – ConCurrent Options [grades 9-12]	Flexibility	
Wheeler Elementary, Louisville, KY [grades K-5]		Small class size Ungraded Team teaching

Site Visits

Given the diverse nature of the time-related innovations that we selected, we tailored the number, duration, and design of site visits to the circumstances of each site. For example, New Orleans's effort to extend the school year in multiple schools required a five-day site visit to adequately cover the range of implementation issues at individual schools as well as school- and district-level effects. By contrast, the Nativity Mission School in New York required three-days of on-site investigation. The ConCurrent Options program, sponsored by New York City's High School Division, required a thorough review of the district's documentation, telephone interviews with program staff, and, two days on site to interview faculty and student participants. This variability notwithstanding, several key features and a core set of fieldwork activities defined the basic site visit format in all instances. Furthermore, site visitor training helped to ensure that data were collected consistently and reliably across sites. These three aspects of the fieldwork--key features, training, and core activities--are discussed below.

Key Features of Fieldwork

- Most case study sites were visited by a two-person team, composed of one senior and one more junior staff member of the research team.[4]

- Communications and the coordination of all data collection at each site were the responsibility of one member of the site team--the "site coordinator."

- Site coordinators oriented the contact person at each site to this study by: (1) extending an invitation to participate in the study by way of a telephone call; (2) sending a formal letter of invitation that explained the study's purposes and design, described our procedures for maintaining confidentiality, introduced the site team, and provided an overview of the site visit schedule and a summary of the data to be collected; and (3) following up with a telephone call to confirm all arrangements.

- All study team members met periodically during the conduct of the fieldwork to coordinate data collection across sites by comparing field notes and field experiences, and by discussing issues, concerns, and emerging hypotheses.

---

[4] A premature and ultimately temporary termination in the funding necessitated one-person visits to several sites. Once funding was reinstated, we followed up our on-site data collection through telephone calls, as necessary.

- The first round of site visits occurred between late fall, 1992 and spring, 1993. A second set of visits to additional residential school sites took place in the fall of 1993.

Site Visitor Training

Site visitor training actually began during the design phase of the study. The entire study team was consistently involved in all aspects of planning, including development of the conceptual framework, conduct of background interviews, site selection, and development of data collection instruments and the analysis plan. In late fall of 1992, near the time when the first site visit was scheduled, site visitors participated in a one-day training session. During the session, the study team members reviewed site visit etiquette and routine procedures for making initial contacts with the field and maintaining good communications; this review used a written guide developed by senior staff from long experience in the field. The main purpose of the session, however, was to train the study team to know what to look for at each site, how to observe various activities, how to record what they observe, how to motivate respondents to provide accurate and complete information during interviews, and how to probe for additional information. During the training, we also acquainted all the site visitors with the various data collection forms and write-up responsibilities, and discussed tips about scheduling, observation, and interview procedures.

Core Fieldwork Activities

The core fieldwork activities discussed in this section were all guided by data collection instruments, which are introduced below. The actual instruments appear in Appendix A.

All case studies began with a ***document review***. Starting at initial contact with each site, we began to build document files that contain general descriptive information about each site as well as details about the specific time-related innovation under study (e.g., enrollments, faculty size, class size, demographic data on the student body, attendance rates, etc.). The site visits served as a vehicle for augmenting our files with additional archival data, which we pulled from documents found on site.

For all case studies, we ***interviewed adult educators*** who are associated with the planning, implementation, and evaluation of the innovations we sought to understand. Depending on the site, those adults were a combination of district administrators, principals, counselors, teachers, paraprofessionals, and other support staff as appropriate. We conducted most interviews in person.

However, considerations of scheduling convenience, time, and cost resulted in a few telephone interviews.

Focus groups served an important function for this study. They were our principal vehicle for learning about students' observations of, attitudes toward, and opinions about the time-related innovations under study. In cases where students had a voice in selecting the school they attend, we also discussed their choices and reasons for making them; where appropriate, we asked students to compare schools they previously attended with their current school. Each focus group involved six to eight students in a semi-structured discussion. The focus group methodology that we practiced is presented in greater detail in Appendix A.

Many, but certainly not all site visits included ***observations of teaching or learning activities***.[5] The activity observations permitted the study team to gain first-hand experience in the types of instructional practices that result from the time-related innovations under study. These experiences enhanced our analysis of the outcomes of various initiatives (e.g., roles and relationships of teachers and learners, student engagement).

While on site, each site team enlisted the cooperation of faculty volunteers in the use of a set of ***out-of-school time diaries*** that chronicle the after-school activities of a sample of students in grades 3-12 over a specified period of time. Although the samples are not statistically representative of all students at each site, they were purposively selected in consultation with the site contact person to reflect the grade span and academic range of the site's student population. We conceptualized the diaries as an action research approach to data collection involving teachers and students. Teachers were free to use the data as the basis for lessons of their own (e.g., discussions with teens about time use, aggregation of data, display of data, etc.) The diaries were structured to collect prespecified categories of information; we adapted time diaries developed by Carpenter and Huston (1983)--and also used by Posner and Vandell (no date)--to the purposes of this study. This format permitted within-site aggregation and quasi-cross-site analyses.

---

[5] For example, team teaching of ungraded student groupings at Wheeler Elementary School warranted observation, as did the off-campus learning activities at Chiron Middle School. The ConCurrent Options Program offered by New York City's High School Division, however, did not require observation. Any individual "option" that we might have observed is not particularly innovative; the unique and potentially instructive aspects of this program are its administrative features, its overall flexibility, and students' responses, which we examined through interviews and document review.

The cooperation of on-site teachers was essential for the success of this action research strategy, so we worked with the site contact to select enthusiastic teachers and we assisted the teachers in integrating the diary activity into their curriculum plans. At the secondary level, students completed the diary for a one-week (seven day) period. We enlisted the assistance of classroom teachers to help introduce the diary format and recording task to students, monitor their completion, and gather them at the end of the designated week. At the upper elementary level, we prepared a curriculum package for the participating classroom teachers to use in administering the time diary. The curriculum package required the teacher to guide students in completing the out-of-school time diary for one day at three designated times during a semester (e.g., once a month). The package assisted teachers in presenting and reinforcing academic skills (e.g., applying the scientific method to answer a scientific inquiry, collecting empirical evidence, and designing and interpreting graphs) and yielded data for this investigation on the students' uses of their out-of-school time.

Specialized Site Visit Plans

As mentioned previously, two of the case studies required specialized plans to ensure an adequate examination of the unique features that characterize their time-related innovations. These two specialized cases--in New York City and New Orleans--are discussed here.

New York City High School Division case study. The variety of programs in the nation's largest school system hold great potential for useful research on the uses of time. One program--ConCurrent Options--is of particular interest and resulted in a case study that offers a glimpse at the uses of student and teacher time both in and out of school. ConCurrent Options is a collection of alternative opportunities to earn credits toward graduation. Each program is designed to use time flexibly and to meet the needs of overage students. Included among the options are independent study, mentoring/internships, PM school, summer school, shared instruction, night high school, college classes, and work experience. Students in 125 public high schools participated in one program or another in 1992-93. Taken as a whole, the programs represent a concerted effort to rethink the school day and year, and to reconfigure it to match the particular needs of high school students overage for their grade.

Although each individual program may not represent a major innovation, the overall program does allow us an opportunity to examine the barriers to flexible uses of school time in a large bureaucracy. The program has been underway for some time and will therefore yield information on barriers and, more importantly, successful strategies for overcoming those barriers. Our procedures were as follows:

- Reviewed existing program descriptions and recent program evaluations
- Conducted individual and group interviews with administrators responsible for developing the programs (e.g., PM School, Independent Study, Night High School, Summer School, and Shared Instruction)
- Conducted individual and group interviews with administrators and teachers responsible for implementing the programs
- Conducted separate group interviews with students enrolled in the programs
- Summarized each interview and analyze the collected data focusing on the implementation questions

New Orleans Public Schools case study. The district's experience with extending the school year makes the New Orleans Public Schools a fruitful site in which to examine issues related to year-round schooling and its effects on students and teachers. Although they no longer do so, two elementary schools operated a 200-day school year from 1989-1992. Visits to these schools were supplemented by an in-depth review of the rich data base compiled by the local research director on all students who attend the district's schools, both traditional and extended-year. Statistics on student achievement, attendance, and background characteristics have been maintained for a number of years, as has information on the district's teachers. The success of the extended year can thus be compared with outcomes for other types of interventions or reforms in this district.

Our goal for this case study was to examine the implementation and outcomes of the two extended-year schools in comparison to the design and outcomes of other types of interventions in similar New Orleans schools. Our procedures were as follows:

- Conducted individual interviews with the district research director
- Conducted individual and group interviews with administrators and teachers responsible for implementing the extended-year programs at Moton and Lockett Elementary Schools
- Conducted focus group interviews with students attending the extended-year schools and other schools in the district
- Conducted individual or focus group interviews with parents of children attending both the traditional and extended-year schools
- Worked with the research director to analyze the district-wide data base on students and teachers in both the extended-year and traditional schools

Data Collection Instruments

We developed five types of core instruments for collecting data during site visits: (1) the site context record, (2) interview guide for adult educators, (3) guide for student focus groups, (4) activity observation guides, including in and out-of-school activities, and (5) out-of-school time diaries. Site visitors used these instruments as appropriate in conducting their fieldwork at individual sites. Below we describe the instruments, which can be found in Appendix A.

Site context record. All site visit teams completed a site context record, which provides general descriptive information about the site and surrounding district and community. For schools, this included information such as total enrollment, grade levels served, racial/ethnic distribution, percentage of students performing at or above grade level, etc. Information about the surrounding community included facts such as size and type, socioeconomic status, ethnic/racial composition, per pupil expenditure, etc. In addition, any relevant documents available on-site, such as internally or externally conducted program evaluations, were thoroughly reviewed and abstracted.

Interview guide for adult educators. We used this interview guide with teachers, administrators, counselors, or other adults involved with students in the classroom. Since not all items on the guide applied to all respondents or situations, site visitors tailored the interview to make relevant inquiries. This interview guide covers basic features of the time-related innovation--how time is altered and for whom, who participates, finances, future plans, the process of change involved in implementing the innovation, the main players and events, sources of support and barriers to success. We also inquired about the time innovation's effects on curriculum and assessment, instructional strategies, organization of teachers' work life and use of time, and student outcomes. We also explored parent and community support for and involvement in the time innovation. Finally, we asked educators about their knowledge and perceptions of students' out-of-school use of time and the extent to which this use of time is educational.

Student focus groups guide. The focus group interview guide was designed to direct discussion among students on two topics: in-school uses of time and out-of-school activities. The discussion of in-school uses of time focused on what students consider worthwhile about school and what they don't like--or would like to change--about the school schedule, curriculum, etc. At magnet or alternative schools, we asked students to compare their current school experience with experiences at other schools. The discussion of out-of-school time use addressed how students spend time when they are not in school, including what they believe they learn out of school and how it relates, if at all, to school-related skills and knowledge. Separate guides for elementary and secondary students take the differences in their age and maturity into account. In addition, the guides

ask questions about the group and age-group in general to avoid the tendency of the middle and high school students, especially, to feel uncomfortable when singled out for attention.

Activity observation guide. This instrument guided observations of school activities and (as appropriate to individual sites) out-of-school activities to insure comparable observations across sites. For in-class activities, the guide asks observers to record general demographic information about the students, whether or not they appear motivated, and the types of materials available to them. It also reminds the observer to gather detailed information about curriculum and instruction--subjects covered, cross-disciplinary themes, skills, use of technology, grouping arrangements, student-student and student-instructor interactions. To insure meaningful comparisons of the amount of time devoted to specific classroom strategies, site visitors recorded the exact time whenever students shifted to a different subject, activity, or grouping arrangement.

Out-of-school time diaries. The out-of-school time diaries were used to describe and assess students' participation in activities with varying amounts of structure and their routine experiences at home. The diaries, which are an adaptation of an instrument developed by Carpenter and Huston (1983), require students to record their afterschool activities by 15-minute time blocks, including the following descriptive information: location of activity, who else was present (adults, other children or youth), and the nature of the primary and secondary activities in which the student was engaged. Secondary school students completed a one-week diary; elementary school students in grades 3-5 completed three one-day diaries over the course of one semester.

III. DATA ANALYSIS

Four types of data were collected for this study: (1) data from the site context record; (2) field notes from on-site interviews and focus groups; (3) documents and hard copy reports on outcomes from some or all sites; and (4) data from the student out-of-school time diaries, which were coded to create a data base for analysis. All data sources contributed to both within-case and cross-case analyses.

We analyzed the data collected during the site visits in two stages using a multi-site case study design with the study's research questions forming the analytic framework. The value and validity of a case study approach is now well-accepted in the educational research community (see, for example, Greene and David, 1984; Miles and Huberman, 1984). It is particularly appropriate in studies such as this one where the sites--our unit of analysis--are nonstandard (e.g., school district, school, program) and vary by time-related initiative (e.g., year-round school, ungraded school, flexible programming, longer school year). Thus, during the first stage of analysis, we treated each site separately and synthesized findings through within-case analysis. The case study reports were based on a common site summary outline that was our analytic reporting format for this analysis activity.

The second stage of analysis was the cross-case analysis, organized by topics and specific research questions. We looked for patterns that emerged across sites and identified common circumstances or conditions that seemed to limit or support the activities or goals of the initiatives. To the extent that valid and reliable differences in student outcomes were documented among reform efforts under study, we examined the qualitative data to identify and explore factors that may have contributed to these indicators of program effectiveness.

The research design and data collection methods have yielded suggestive rather than definitive cause and effect relationships between time-related reforms and outcomes. Documentation of positive (or negative) outcomes for students in individual sites and in multiple sites that have certain characteristics in common offer the audience for the study some evidence that different configurations or uses of the time available for teaching and learning can be a significant and manipulable variable in the overall quest for educational improvement.

During both the within-case and cross-case analyses, we drew on the literature review, commissioned papers, conference proceedings, and additional readings in order to discuss the initiatives within a broader context.

Within-case Analysis

The purpose of within-case analysis was to bring together in an organized way all available information obtained from or at a given site. The process of analysis began, even before data collection began, with a training meeting designed to acquaint all site visitors with the conceptual framework, the specific research questions posed by the study, the relationship between research questions and interview or focus group guides, and the structure of the site visit reporting guide that was to be used to summarize the information collected.

The second stage, within-case analysis, took place on site. All site visitors were highly experienced interviewers and focus group leaders. The interview and focus group guides were simply outlines of basic areas to be covered. In most situations, respondents' answers to initial questions drove the rest of the interview session by providing the seasoned interviewer with hints of further areas to probe. At the end of a day in the field, site visitors compared notes on the "story" that they heard, sometimes finding areas of discrepancy that had to be clarified in subsequent interviews or follow-ups. This process, sometimes called triangulation, was part of the early stages of analysis.

The third stage involved codifying the information reported by students on their out-of-school time diaries. Carpenter and Huston (1983), the designers of the original diary, developed a set of 20 out-of-school activity codes, for elementary school students, which we modified to fit the secondary school population and the purposes of this study. Using this modified scheme, we coded all out-of-school activities by type (e.g., reading, watching television) and status (i.e., primary or secondary activity). We entered these and other data from the diaries (e.g., student characteristics, time and duration of activity, other participants, etc.) into a computerized data base to facilitate within site aggregation and cross-site comparisons.

The fourth stage occurred when site visitors reviewed their notes, identifying the appropriate sources of information for each section of the reporting guide. Data extraneous to the central theme of the study were set aside, significant quotes were identified, and a logical presentation of the "story" was planned and created. The result was an analytic report about each site that was used for cross-site analysis. Further refinement to these reports yielded a draft case study report about each site that was sent back to key interviewees for review and validation. These case study reports, approved for publication by the sites, appear in Volume II of this technical report.

The format for the within-case reporting guide followed the structure for the research questions. The outline contained the following sections:

- ***Overview and context***. This section presents the background information on the site collected through the school context record, other documents, and interviews.

- ***Nature of the innovation***. This one- or two-page summary highlights the specific time-related innovations adopted and implemented by the site.

- ***Design issues***. This section describes how and why the time-related reform was selected and adopted. Specific issues include the needs that the reform addresses, the explicitness of local understandings about time as an educational variable, the interrelationship between quantity and quality of time issues, and detailed description of how the time-related reform operates.

- ***Implementation issues***. This section tells the most interesting part of the story. Many sites have been selected on the basis of their experience with time-related reforms that have great potential to become contentious issues, both within the school community and in the community at large (i.e., year round schooling, ungraded classrooms, flexible scheduling, extended school year). Here, site visitors report on how the reform became firmly established, how it changed from the original vision, and how it was facilitated or constrained by policies, organizations, individuals, or funding. Site visitors also consider the minimum conditions needed if the reform were to be replicated.

- ***Impacts and outcomes***. The bottom line in education reform should be better learning outcomes for students. Experience tells us, however, that (1) this goal can easily become lost amid the pressures of designing and implementing a reform and (2) local documentation and evaluation activities that might make a direct link between a specific innovation and improved outcomes is nearly always inadequate. In this section, site visitors present any and all evidence that they have been able to acquire demonstrating that the time-related reform has, in some way, made a significant difference for children and youth. To the extent possible, they analyze any differentiation in outcomes for different groups of students. Finally, they consider whether the effects of the time-related reform have had or could have any impacts on the various levels of the education system.

- ***Educative uses of non-school time***. For each site, the data available for analysis on uses of non-school time include non-school time diaries for a sample of students, notes from student focus groups, and information about the range and general use of local afterschool activities obtained through interviews with teachers and administrators. In a very limited number of cases where there were extended day activities on site, observation data is available as well. In this section, site visitors describe the local patterns of students' out-of-school uses of time, highlighting where possible differences among groups. They also present the perceptions of students and adults on the value and contributions of out-of-school patterns of activity to the learning process and the development of the whole child.

- ***Resources***. Level of resource use is a primary concern among practitioners and policymakers, particularly when considering the "portability" of a particular innovation to other sites. In this section, site visitors summarize the type and amount of resources required to implement the time-related reform under study and offer comparisons, where possible, to other comparable schools or initiatives (e.g., site, local district, and state per pupil expenditures).

- ***Strengths, weaknesses, and policy implications***. In this final section, the site visitors reflect on and summarize what they have learned about time-related reforms in this site. Is the strategy a promising one to disseminate and promote as a model for educational improvement? What might state and federal policymakers do to facilitate wider implementation of promising strategies?

Cross-case Analysis

Once the individual within-case reports were prepared, we undertook cross-case analysis. The themes for cross-case analysis began to emerge much earlier as the study team convened periodically during and after fieldwork to share experiences, revisit the broad policy issues raised at the beginning of this document, discuss early findings, and amass evidence to support or refute established and emerging hypotheses. When draft site reports became available, individuals and pairs of study team members read and analyzed all the case study reports to look for patterns that emerged across the study sites regarding specific policy questions, research questions, and hypotheses.

The basic purposes of our cross-case analysis were identification of patterns and hypothesis testing. Even before any data were collected, the Uses of Time study operated from a set of assumptions (hypotheses) that would or would not hold up in the end. Our preliminary set of hypotheses regarding the quantity and quality of time in school and the quality of out-of-school time included the following:

- Time is a significant and manipulable educational variable that, on its own or in combination with other kinds of reforms, can contribute to educational improvement.

- Simply adding more time to the school day, week, or year will not, by itself, lead to improved educational outcomes for students.

- Different methods of arranging, using, or thinking about existing school time may prove effective with some or all students.

- Reform in the ways that time is structured for learning in school often leads to reform in other areas such as curriculum and assessment, and vice versa.

- Systematic reform of any kind that has an impact on schools and classrooms requires substantial commitments of teacher time for understanding its intent, establishing goals, planning, implementation, and ongoing assessment of its success or effectiveness.

- Educators need to do a better job of deliberately helping students connect in-school learning with what they do or want to do out of school.

These hypotheses began to alter and others were generated the moment the study team set foot in the field. Periodic debriefing sessions fostered this process. Preparation of a cross-case analysis product helped the team to confirm, reject, or refine the hypotheses and transform them into findings that reflect the limiting conditions, general tendencies, and explanatory factors in the sites investigated. The final step in the analysis process was the preparation of Volume I: Findings and Conclusions, the heart of this technical report.

REFERENCES

Carpenter, C. J., & Huston, A. C. (1983). "The structuring of children's time in middle childhood." (In T. Juster Chair). Time Use: Methodological Issues and New Findings. Presented at the Meeting for the Society for Research in Child Development, Detroit, Michigan. April, 1983.

Funkhouser, J., Humphrey, D., & Adelman, N. (forthcoming). Year-round education and school reform. Washington, DC: Policy studies Associates.

Greene, D. & David, J. (1984). "A research design for generalizing from multiple case studies." Evaluation and Program Planning, 7, 73-85.

Miles, M., & Huberman, M. (1984). Qualitative data analysis. Beverly Hills, CA: Sage Publications.

Posner, J. K., & Vandell, Deborah L. (No date). "Low-income children's after school care: Are there beneficial effects of after school programs?" Unpublished.

APPENDIX A
Data Collection Instruments

Appendix A1: Site Context Record
Appendix A2: Interview Guide for Adult Educators
Appendix A3: Guide for Student Focus Groups
Appendix A4: Activity Observation Instrument
Appendix A5: Out-of-School Time Use Diary
Appendix A6: Focus Group Methodology

APPENDIX A1
Site Context Record

Secondary School Context Record

Site:_____ Public_____ Private _____

1. Total student enrollment:_____
2. Number of teachers_____
3. Average class size_____
4. Grade-levels served: _____
5. Total special education enrollment_____
6. Racial/ethnic distribution:

   White ____ Black ____ Hispanic ____ Asian ____ Native American ____
7. Poverty levels (Report at least one.)

   Percent of students receiving free/reduced-price lunches_____

   Percent of students receiving AFDC_____
8. Percent of limited-English proficient students_____
9. Percentage of students performing at, or above grade-level in

   Mathematics_____ Reading/Language arts_____
10. Average daily attendance rate_____
11. Percentage of over-age students, per grade_____
12. Dropout rate_____
13. Graduation rate_____
14. Percentage of graduates who enroll in postsecondary educational institutions _____
15. Percentage of graduates entering employment_____

Elementary School Context Record

Site:_____ Public_____ Private _____

1. Total student enrollment:_____
2. Number of teachers_____
3. Average class size_____
4. Grade-levels served: _____
5. Total special education enrollment_____
6. Racial/ethnic distribution:

   White _____ Black _____ Hispanic _____

   Asian _____ Native American_____
7. Poverty levels (Report at least one.)

   Percent of students receiving free/reduced-price lunches_____

   Percent of students receiving AFDC_____
8. Percent of limited-English proficient students_____
9. Percentage of students performing at, or above grade-level in

   Mathematics_____ Reading/Language arts_____
10. Average daily attendance rate_____
11. Percentage of students retained in grade_____
12. Percentage of students receiving Chapter 1 services _____

Community Context Record

1. Urbanicity_____

2. Population size_____

3. Per capita income of residents_____

4. Ethnic/racial composition:

   White _____ Black _____ Hispanic _____

   Asian _____ Native American_____

5. Per pupil expenditure_____

6. Number of schools: Elementary_____ Secondary_____

APPENDIX A2
Interview Guide for Adult Educators

I. What are the basic features of the time-related innovation(s)?

- What was the impetus for the innovation and when was it implemented?
- How is time altered and for whom (amount of additional time per day/week/year; whether some spend less time in classroom as result of innovation)? Is the available instructional time used more **flexibly**, whether or not instructional time is increased or decreased?
- Who participates (numbers, demographics) and is participation required? Are there selection criteria and if so, who selects?
- Is the innovation part of a system-wide effort?
- How is it financed (does it require extra money)?
- What course is the innovation expected to take in the future?

II. Describe the process of change involved in implementing the time-related innovation(s). What factors have supported or deterred implementation?

- Describe the main actors and events involved in the decision-making process.
- Are other reforms occurring simultaneously that have affected the time innovation (e.g., school-based management)?
- What efforts were taken to inform and enlist the support of parents, students, and other local groups?
- Has the innovation significantly affected other school instructional variables, offerings or programs (e.g., course offerings, class size)? If so, how?
- Has the innovation affected local programs or groups in the community, such as the teachers' union?
- What sources of support contribute to successful implementation?
- What factors present barriers to successful implementation and what can others do to avoid these barriers?

III. **What effects has the time-related innovation(s) had on curriculum and assessment?**

- How has the curriculum been altered, and what are the benefits for students and teachers?
- What role does technology play with regard to the time innovation(s)?
- How, if at all, has the process of student assessment changed?

IV. **What effects has the time-related innovation(s) had on instructional strategies?**

- How are students grouped for particular lessons or activities (age, ability, size, stability)?
- What is the stability of the relationship between instructors or leaders and students over time (e.g., students stay with a team of teachers for several years)?
- What types of student-student and teacher-student interaction typically take place? To what degree are students "passive" (e.g., lecture and recitation) or "active" learners (e,g., discussion leaders and participants, peer tutors)? Has the innovation created new roles for teachers and/or students?
- How is instruction individualized?
- What roles do parents, other family members, and/or the community play in students' instruction or in the educational activity; what effect has the innovation had on community relations?

V. **What effects has the time-related innovation(s) had on how teachers organize and use their time?**

- What is the effect on how much time (quantify where possible) teachers spend:
  - In the classroom?
  - Planning lessons/activities (both during and after the regular day ends)?
  - In training?
  - Involved in assessing student progress?
  - Involved in site-based management/administrative activities?

VI. What other effects/outcomes are associated with the time-related innovation(s)?

- Teacher motivation and self-esteem (e.g., participation in training and professional development activities, collaborative ventures, taking on new roles in the school or classroom, administrator views of improved teacher effectiveness, etc.
- Student motivation and self-esteem (e.g., participation in class, in academic clubs or extracurricular events, etc.)
- Learning per unit of time
- Deeper understanding per unit of time
- Traditional measures of student achievement (e.g., standardized test scores)
- New methods of assessment (e.g., portfolios, writing assessments, performance of tasks, etc.)

VII. How do students use their out-of-school time, and in what respects is their use of this time educational in nature?

- What school or community sponsored activities are available for students after regular school hours and to what extent do students take advantage of them?
- Do students and teachers consider these activities to be educational and, if so, in what respects?
- What is the relationship between what students learn in and out of school?
- What structures exist, if any, to help the participating students relate their educative out-of-school learning to academic skills and knowledge?
- Is there any evidence that out-of-school experiences can substitute for core classes in order to free time up for other electives?

For organized educative activities that occur outside of the school day:

- Who are the primary sponsors?
- What are the goals and objectives of the activities?
- Who are the intended and actual participants, and on what basis do they participate?

APPENDIX A3
Guide for Student Focus Groups

Secondary School Students

In-School Time Use

1. How, if at all, is the (time innovation under study) helpful to you? What do you like about it and why?

2. How, if at all, is the (time innovation under study) a problem for you? What would you like to change about it and why?

3. If the (time innovation under study) were discontinued tomorrow, would it make a difference in your school life? If so, how?

4. What do your parents think, if anything, about (the time innovation under study)?

5. What do you like best about this school?

6. If you could change anything about this school, what would it be?

FOR STUDENTS AT MAGNET OR ALTERNATIVE SCHOOLS

7. Why did you choose to attend this school rather than your neighborhood/regular comprehensive high school?

8. What, if anything, is different about this school compared to other schools you have attended? How is it the same as those other schools?

Out-of-School Time Use

1. Think for a minute about how you spend your time after school, and on weekends. Is this the way you want to spend your time? What would be a better way of spending your time? Why aren't you doing something else?

   Probes: Enjoy doing it because...

   -- School requirement

   -- This is a good opportunity to learn something new or improve my skills/grades

   -- Experience is good for college or future career

- Peer/parent influence encouraged or discouraged participation

- Time and/or financial constraints prevented involvement in other activities

- Inaccessibility of desired activity to home or school

- Too much time alone

- Would like to be employed more/less hours

2. We will have a good idea about how you spend your out-of-school time during the school year, based on the information you reported in your time diaries. However, we'd also like to learn about your summer activities. What did you do this past summer? How was it different from the way you usually spend your free time during the school year?

3. Have you learned anything important in your part-time job, or in any of the other after-school or summer activities that you've described so far? Did you need to have any special skills or knowledge before you got involved, and if so, where did you learn them?

   Probes:

   - How to get along better with different types of people

   - Improved reading, writing, or study skills

   - Greater sense of independence, enhanced self-esteem/confidence

4. Are there certain school subjects/skills that you believe you should spend/have spent more or less time learning/developing? Why? How could you have done this? Would it have affected how you use your out-of-school time?

5. Are there any groups or individuals at your school who encourage you to use what you've learned outside of school in any of your classes, or to gain academic credit?

6. What's the best part of your day?

   Probes:

   - At school, at home, somewhere else...

   - When you're doing...

Elementary School Students

In-School Time Use

1. [IF APPROPRIATE] Do you like the (time innovation under study [e.g., having three teachers, in the case of team teaching; having a longer school day but a shorter school week])? Why or why not?

2. What do you like best about this school and why?

3. If you could change anything about this school, what would it be?

Out-of-School Time Use

1. Do you like doing...(mention activities reported in diaries)? Would you prefer to be doing something else? If so, what?

2. Are there rules about what you can and can't do after school? If yes, what are they? Who made the rules?

3. What kinds of things did you do this past summer? Would you have preferred to have done something else?

   Probes:

   - Summer Camp (type?)
   - Summer school
   - Vacation with family
   - Watched television
   - Played with friends

4. What is your favorite part of the day? Worst part of the day?

APPENDIX A4
Activity Observation Instrument

In-Class Activity Observation Guide

Observer:_____ Date:_____ Time:_____to_____

Site:_____ Grade(s):____ Teacher:_____

Students: (number)____ (race, class, gender)_____

Time Innovation:_____

LOOK FOR EVIDENCE OF A QUANTITY OR QUALITY OF TIME INNOVATION

Classroom Log: Please keep a record of changes or shifts in the classroom activity, subject, or grouping arrangement. For example:

10:00 - Teacher begins language arts instruction with group A; starts with review of homework (discussion). Group B doing seatwork

10:10 - Teacher turns discussion to pre-reading introduction to topic of camping in the wilderness

Summary Observations:

Classroom climate

- Physical environment (seating patterns, noise level, comfort, appearance, equipment)

Student behavior

- Enthusiasm and participation (student engagement and apparent concentration)
- Grouping and cooperation (student-student interactions)

Teacher behavior

- Classroom management
- Enthusiasm and tone

Classroom activities observed

- Subject area(s) and skill level
- Types of activities (lecture, discussion, seatwork, projects, materials used, technology)
- Extended activities (homework, parental or community involvement)

Out-of-class Activity Observation Guide (for use in selected sites)

Observer:_____ Date:_____ Time:_____to_____

Site:_____ Grade(s):____ Teacher:_____

Students: (number)____ (race, class, gender)_____

Time Innovation:_____

LOOK FOR EVIDENCE OF A QUANTITY OR QUALITY OF TIME INNOVATION

Activity Log: Please keep a record of changes or shifts in the out-of-school activity.

Summary Observations:

Out-of-Class Activities Observed

- Describe (nature of activity, location, time spent on activity)
- Skills taught and/or learned (relation to school or in-class instruction)
- Quantity and quality of adult contact, peer contact

APPENDIX A5
Out-of-School Time Use Diary

[NOTE: Actual diaries were printed on larger paper with an inviting cover, instructions, and a user-friendly format.]

OUT-OF-SCHOOL TIME DIARY - SECONDARY SCHOOL
(Sample of Completed Diary)

Student Background Information

Student Code Number: _____ (PSA USE ONLY)

Grade Level: 6 7 8 9 10 11 12

Race/Ethnicity: White Black Hispanic Asian Nat. Amer.

Gender: Female Male

Grade Point Average: _____

Time	Where were you?	What adults were there?	What other children or teenagers were there?	What did you do?	What else did you do?
MONDAY 3:00 pm					
3:15 pm					
3:30 pm					
3:45 pm					
4:00 pm					
4:15 pm					
4:30 pm					
4:45 pm					
5:00 pm					
CONTINUE THROUGH 11:45 PM					

OUT-OF-SCHOOL TIME DIARY - ELEMENTARY SCHOOL
(Sample of Completed Diary)

Student Background Information

Grade Level: 3 4 5 Student Code Number: _____ (PSA USE ONLY)

Gender: Female Male Race/Ethnicity: White Black Hispanic Asian Nat. Amer.

Time	Where were you?	What adults were there?	What other children or teenagers were there?	What did you do?	What else did you do?
MONDAY 3:00 pm					
3:15 pm					
3:30 pm					
3:45 pm					
4:00 pm					
4:15 pm					
4:30 pm					
4:45 pm					
5:00 pm					
5:15 pm					
5:30 pm					
CONTINUE THROUGH 11:45 PM					

APPENDIX A6
Focus Group Methodology

Introduction

- Group discussion used as a self-contained evaluative research tool, as a supplement to quantitative data or as an exploratory tool to suggest directions for further quantitative data collection. Use of focus groups in the Uses of Time study falls primarily into the first category.

- Combines elements of two better known approaches: individual interviews and participant observation

- Advantages:

  - Opportunity to collect a great amount of data in a limited time frame

  - Observe interaction on a topic: give and take of interaction leads to relatively spontaneous responses and a high level of participant involvement

Planning Concerns

- Group size should be moderate - 6 to 8 or so

  - Too small is less productive and more costly, and requires a more demanding contribution from each participant.

  - Too large is difficult to manage the discussion.

Conduct of the Group Interview

Role of the Moderator

- In a nutshell: introduce session and topics of discussion, politely cutoff unproductive discussion and probe issues we want to know more about. DO NOT impose moderator's personal opinion of what's interesting and important.

- Level of involvement depends on research goals: low level more important for exploratory research; higher level important to control topics and dynamics of discussion. (We veer towards the latter.)

Role of the Recorder

- Be thoroughly familiar with issues.
- Take as thorough and complete notes as possible, including information about:
  - Seating plan, with names
  - Changes in the questioning route
  - Identifying characteristics of participants
  - Descriptive phrases or words used by participants as they discussed the key questions
  - Themes in the responses to the key questions
  - Subthemes indicating a point of view held by participants with common characteristics
  - Descriptions of levels of participant enthusiasm
- Conduct debriefing with moderator immediately after interview to try to resolve any "holes" in your notes and reach agreement on findings and interpretation of the key issues of the case study. If there is disagreement, record both points of view for later examination. Include consideration of:
  - Consistency between participant comments and their reported behaviors
  - New avenues of questioning that should be considered in future groups
  - The overall mood of the discussion (eager to discuss, etc.)
- Write focus group summary as soon as possible after interview and give to moderator to review.

Use of an Interview Guide

- Assure all desired topics are pursued.
- Assure comparability across sessions.
- Avoid tendency to follow pre-determined order of topics too rigidly. Moderator needs to be free to probe more deeply when needed, skip areas already covered and follow completely new topics as they arise. Too much emphasis on the outline and not enough on participant's own interests will stifle the discussion.

Getting Started and Moving Along

- ***Introduce the study*** in an honest but fairly general fashion. Stay away from technical jargon. If you are too specific some may not be able to follow a researcher's detailed discussion or it may cause participants to restrict and channel their discussion. A moderator who appears to be too much of an expert will shut off many lines of discussion.

- ***Set some ground rules***:

  - Only one person speaks at a time.

  - No side conversations among neighbors are allowed.

  - Everyone should participate.

  - It may be necessary for the site visitor to re-direct conversation.

- ***Give license to expressing different points of view***. Stress that all points of view, both positive and negative, are needed and wanted. There are no right or wrong answers.

- ***Break the ice***. Start with yourself. Next, have each participant make an uninterrupted statement that is autobiographical in nature.

- ***Use the guide***. The initial topic is meant to spark discussion. After about 5 minutes of discussion (Hopefully!!!), the moderator should introduce the first specific topic (interview guide probes): "I've heard several of you refer to.....I wonder what the rest of you have to say about that?" This is referred to as "tracking" the discussion; the moderator must remember things mentioned earlier (and should take some brief notes for this purpose) and use them to move to the next segment of the guide.

- ***Deal with latecomers***. Invite them into the group. "Come in and please join us. Your first name? As you know, we have invited you here for a group discussion of.... At the moment we are talking about....."

- ***Restart discussion***. When the group runs dry, introduce a new topic (using interview guide probes) or pick up on an important theme mentioned earlier;

- ***Cut off overly dominant participants***. Say, for example, "If I could interrupt for one minute...what do the rest of you think about John's position on that?" "Thank you John, are there others who wish to comment on that?" "That's one point of view, does anyone else have another?"

- ***Engage overly reticent participants***. Say, for example, "John, we haven't heard from you yet. What do you think about that idea?"

- ***Watch out for "the rambler"***. When a participant uses a lot of words but never gets to the point, first try to interrupt with a probe for more specificity. If that doesn't work, discontinue eye contact after 20-30 seconds and be prepared to fire another question as soon as he/she finishes talking.

- ***Remember the time!*** Try to keep things moving while at the same time exhausting the discussion about each topic.

- ***End the session.*** Provide a clear indication of when the session is ending. Asking each person to give a final summary statement may allow a particular participant to make a contribution that he/she has been holding back.

Helpful Hints for Skillful Moderating

- ***Ensure "group thinking" doesn't stifle opinions that differ from the majority***. "In contrast to that opinion I heard someone mention (or some might say)....What do you think about that?"

- ***Avoid generalizations***. When attitudes and opinions are elicited, probe for specific bases for these generalizations. "Would you explain further?" "Would you give me an example of what you mean?" "Please describe what you mean."

- ***Practice the five second pause***. After a participant comment, this short pause often prompts additional points of view or agreement with the previously mentioned position.

- ***Avoid excessive head nodding***. Head nodding at times can be useful if used sparingly and consciously, as in eliciting additional comments. If used excessively, it will only elicit comments of the same type. The negative nod can indicate "wrong" answers.

- ***Short verbal responses*** such as "yes", "O.K." or "uh huh" are acceptable, but "correct", "excellent" or "that's good" imply judgements about the quality of the comment.

APPENDIX B
Study Products

Literature Review (in draft). The literature review surveys research on the educational uses of time for learning. Because "uses of time" is an ill-defined and largely unrecognized subject in the education world, the authors introduce the review by defining terms and setting clear parameters for their work. The review then examines the uses of time under two broad headings: in-school time and out-of-school time. The discussion of research related to in-school time is further subdivided into sections on the quantity and quality of time use in schools. Originally intended to be an internal working document to help the study team ground its investigation in current thinking on the myriad topics that coalesce under the umbrella of time use and learning, the final document is a thoughtful synthesis of literatures rarely, if ever, brought together under one organizing framework.

Conference Proceedings (in draft). With funding from the Uses of Time Study, Policy Studies Associates hosted an invitational conference in collaboration with the U.S. Department of Agriculture's 4-H and Youth Development Extension Service. Attendees explored options for making productive use of adolescents' out-of-school time by linking formal and nonformal education experiences. The conference proceedings synthesize the conference presentations, panel discussions, and small group activities into a set of action statements and explanations that convey the main themes that emerged from the two-day conference.

Monographs and Journal Articles. The Uses of Time Study has produced several monographs and journal articles that examine specific time-related topics. They are:

Time for Teachers in School Restructuring, by Joseph Cambone (to be published in the Teachers College Record Spring 1995)

Serving Time: Schooling, Time, and Reform, by Rexford Brown (forthcoming)

Year-round Education and School Reform, by Daniel Humphrey, Janie Funkhouser, and Nancy Adelman (forthcoming)

An Analysis of Students' Uses of Out-of-School Time, by Janie Funkhouser (forthcoming)

Volume of International Papers (forthcoming). This report examines issues of professional time use by school teachers in different countries. The report contains worklife portraits of elementary and secondary school teachers in five countries--U.S., Japan, the Netherlands, Canada, and Australia--and analysis of commonalities and differences, with an emphasis on time-related issues.

Case Book about Educators' Time and Reform (forthcoming). This case book highlights information on the time-related professional challenges that teachers in innovative schools confront, as well as successful strategies for overcoming them. The book includes an introduction to the topic of educators' time in the context of reform, several authentic cases, and brief commentaries and analyses of each case, all aimed at prompting further discussion and examination of issues related to educators' uses of time.

Technical Report (in draft). This report appeals mostly to the educational research community, but is written for a general audience. It comprises three volumes. Volume I includes an overview of the study, a discussion of the cross-case analysis and findings, and implications for practice, research, and assessment. Volume II contains the individual case studies upon which the cross-site analysis is based. Volume III describes the study's research design and methods.